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January 5, 2000

Mr. David Hung
Los Angeles Region Water Quality Control Board
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

SUBJECT: MASTER WORK PLAN, CENCO REFINING COMPANY (CENCO) (FORMERLY POWERINE OIL COMPANY) SANTA FE SPRINGS, CALIFORNIA, DATED AUGUST 27, 1999

Dear Mr. Hung:

Thank you for your continued oversight coordination efforts for locations in the City of Santa Fe Springs. As the agency charged with administration of the Uniform Fire Code, Certified Unified Program Agency (CUPA) Programs, and other environmental regulations, the City has a legal obligation to ensure it fulfills its responsibilities to protect human and environmental health. The Santa Fe Springs Fire Department (SFSFD) has had an opportunity to do a partial review of the subject work plan, which was addressed to Steve Chase. The work plan suggests that further assessment and corrective action must wait until the future use of the property is determined. Data presented in the subject work plan indicate the presence of contamination at the site. Therefore, in the interest of long-term public health and environmental protection, the SFSFD feels that a complete assessment must be required at this time.

Ongoing site investigations have been conducted since 1985 in response to Los Angeles Regional Water Quality Control Board (RWQCB) Clean Up and Abatement Order No. 85-17 that directed Powerine, along with 14 other refineries, to conduct remedial investigations. This subject Master Work Plan (workplan) was prepared to address petroleum hydrocarbon contamination, citing a subsequent RWQCB Clean Up and Abatement Order No. 97-118, issued to Powerine on August 25, 1997. The work plan references a remedial site investigation at the Bloomfield Property as part of the Powerine Site Investigation in response to the RWQCB 85-17 order. This data indicated the presence of halogenated volatile organic compounds (HVOCs) and other contamination, such as cyanide, at the site. Certain contaminates such as HVOCs may exist in the vadose zone or in first groundwater at this site. This contamination could migrate to groundwater or other media and pose a long-term threat to public health and the environment in the interim. This data justifies the necessity to include the following concerns in the assessment and perform the assessment as expeditiously as possible.

The assessment should include all volatile organic compounds (VOCs) including HVOCs and MTBE, semi-volatile organic compounds (SVOCs) including polyaromatic hydrocarbons (PAHs), metals and inorganics such as cyanide, speciated organic lead, as well as petroleum hydrocarbon (PHC) chain speciation through C40. Other parameters such as soil redox should be measured as well in the interest of fate and transport estimations.

The work plan also refers to replacement of monitoring wells (MW) without concurrent soil sampling. The SFSFD suggests that soil sampling should be done when replacing MWs.

The SFSFD is aware that the site is in a hydrogeologically sensitive area. Lower aquifers can be hydraulically connected to shallow groundwater in this area. Studies such as radiocarbon dating of groundwater could shed light on the likelihood of lower aquifer risk from PHCs and other possible site contamination.

The SFSFD agrees that ASTM Risk Assessment for PHCs, as well as other approaches such as the Total Petroleum Hydrocarbon Criteria Working Group (TPHCWG) approach have merit. However, these are not regulatory approaches and the SFSFD is not obliged to accept conclusions for regulatory review based on these approaches. The SFSFD refers to the EPA Risk Assessment Guidance for Superfund (RAGS), the Cal EPA Preliminary Endangerment Assessment (PEA) and refers to the EPA Region IX Preliminary Remediation Goals (PRGs) as well as RWQCB Interim Guidance in regulatory review.

Some of the assumptions made for the preparation of this work plan as well as a RBCA document seem to be based on relatively old data, such as sampling performed by IT in 1985. This data is incomplete for regulatory review as stated above.

The SFSFD agrees with VERSAR (Pg. 25, Operation Area 2) that vertical extent of PHCs is not defined. We find this true in other locations as well.

VERSAR also refers to several MWs that should be replaced to accurately gauge PHCs in groundwater (GW). We suggest that MWs 103 and 603 be replaced as well for the same reason. The VERSAR report suggests that the current GW gradient is south southwest. We suggest that it is south southeast, based on these data as well as data from adjacent sites. VERSAR suggests using only one MW for testing. However, parameters such as transmissivity conductivity may vary greatly. The data shows two orders of magnitude difference in GW transmissivity at the site. Also, we suggest GW sampling through the GW interval as well as the GW surface.

We find that there is reason to suspect significant HVOC contamination in the vadose zone based on earlier data provided by IT, as well as other reports. For example, IT reported 26 mg/kg "total HVOCs" at 3.5' below ground surface (bgs) (boring 103), and 57 mg/kg at 13' bgs (MW 101). The sampling methods and tests are not stated. These data indicate historic on-site releases of HVOCs, which could contribute to groundwater contamination. The SFSFD notes that data indicates historic off-site migration of HVOCs including daughter products, but notes the apparent presence of TCE on the West Side of the site in the 30 ug/L range, indicating a more recent release. The SFSFD understands that HVOCs are commonly used in isomerization processes and may also appear in the impounding basin, sumps, wastewater system (specifically API separators) and around the chloride storage units. We therefore suggest soil borings and analysis for HVOCs be performed in these areas. The data also indicates the unusual presence of cyanide at a depth that could threaten groundwater and therefore we recommend this issue be examined further.

Also, due to hazardous waste issues at the subject site, the SFSFD will be conducting a limited assessment of the soil conditions in the northeastern area of the CENCO's coke barn. This assessment will include confirmation stockpile sampling as well as sampling of the nearby surrounding area. These activities are not intended to replace any portion of CENCO's site assessment obligations for the facility. The SFSFD will keep the RWQCB informed of the results.

The SFSFD concludes that further assessment is needed, including a Health Risk Assessment and Fate and Transport Analysis. This assessment should be based on new data, identify sensitive receptors, and include surficial soils, the vadose zone, and groundwater data to quantify the Health Risk Assessment and Fate and Transport Analysis. This is to enable accurate long-term risk evaluation assessment from all media at this site by all involved agencies including the SFSFD, based on current data and methodologies. Because of these issues, we would appreciate the assessment be conducted as expeditiously as possible.

As the local agency charged with public health and environmental protection, we look forward to working with the RWQCB on this and other important matters and appreciate your assistance.

If you have any questions, please call (562) 941-7483 and contact Brenda Nelson at extension 155. Thank you again for your assistance.

Sincerely,

Neal Welland

Neal Welland
Fire Chief

NW/sc/bn

cc: Fred Latham, City Manager - City of Santa Fe Springs
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